DRAFT PROGRAM EIR FOR CITY OF CHINO HILLS
PROPOSED *WATER, RECYCLED WATER & SEWER MASTER PLAN*

SECTION 3
DESCRIPTION OF THE PROJECT & ALTERNATIVES

3.1 PROJECT LOCATION

The City of Chino Hills is located in the southwestern quadrant of San Bernardino County, California. The City is in a unique location in that it adjoins three other counties including Riverside County (which shares a small part of the City's southern and eastern boundaries), Orange County (which shares part of the City's southeastern boundary), and Los Angeles County (which shares the western and northern boundaries). Principal transportation corridors in the study area include State Highway 91 (the 'Riverside Freeway'), State Highway 60 (the 'Pomona Freeway,' which provides access to northern Chino Hills), State Route 71 (a major arterial linking the study area with Los Angeles and Riverside Counties), State Route 83 (Euclid Avenue, leading to Ontario) and State Highway 142 (Carbon Canyon Road, which links Chino Hills with the City of Brea in Orange County). The City and surrounding environs are shown in Exhibit 1, Regional Location Map. The 'project Study Area' is the area in which proposed water, sewer and recycled water improvements may in the future be constructed. As shown in Exhibit 2, this potential area of impact focuses on lands within Chino Hills but also includes discussion (where applicable) of land in Chino and areas served by Monte Vista Water District. The project study area is also served by overlying regional management agencies, including the Inland Empire Utilities Agency and the Santa Ana Watershed Project Authority.

3.2 PROJECT PURPOSE, SCOPE AND OBJECTIVES

During 1998, the City completed a series of plans and studies for the water and recycled water systems, including an EIR to evaluate environmental effects that may result from implementation of the 1998 *Draft Water Master Plan*.[1] In the ensuing years, the City has undergone a number of changes and encountered new challenges and opportunities. In recognition of these changes, the City now seeks to update and combine the earlier planning documents. The City's fundamental goal in this effort is to ensure the reliability, adequacy and efficiency of the water, recycled water and sanitation systems through build-out, which is anticipated to occur around 2025. Rather than addressing the systems separately, the 2005 *Master Plan* optimizes closely associated resources and requirements of the water, recycled water and sanitation systems to develop an integrated planning program that will provide substantial flexibility and reliability to all three systems. CEQA[2] requires an EIR to identify the primary purpose and objectives of the proposal. This requirement makes explicit the goals that underlie the actions and approvals sought, and also sets the parameters for identifying feasible alternatives.[3] The City's purpose in proposing the *Master Plan* projects includes the goals and objectives are outlined in Table 3-1.

3.3 DESCRIPTION OF PROPOSED PROJECT

3.3.1 OVERVIEW OF PRIOR PLANNING DOCUMENTS

The City last updated its *Water Master Plan* in 1998. Though never adopted, the 1998 update and associated EIR evaluated changes in the land use planning as outlined in the 1994 General Plan. A key element of the 1998 document was to review the shortfall between water supply and demand that had occurred on three separate occasions during 1996, and to recommend improvement projects to provide a secure water supply for future years.

---

[1]City of Chino Hills, Final Program EIR 97-01, SCH #97101016. Prepared by RBF & Assoc.; 28 April 1998.
[2]CEQA §15124 states: "A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives...and aid...in preparing findings or statement of overriding considerations."
[3]CEQA §15126.6(c) states: "The range of potential alternatives...shall include those that could feasibly accomplish most...basic objectives of the project [&] avoid or substantially lessen...significant effects."

Table 3-1
GOALS & OBJECTIVES OF THE PROPOSED *MASTER PLAN*

- ***Management Tools:*** The primary purpose is to develop management and modeling tools, and a Capital Improvement Plan, to meet short- and long-term water, recycled water and sanitation demands;
- ***Conserve Potable Water Resources:*** through the beneficial reuse of treated wastewater;
- ***Provide a Benefit to Irrigation Customers:*** in the form of low-cost recycled water;
- ***Increase Water Supply Reliability:*** through review of the City's water sources and development of additional potable & nonpotable water;
- ***Provide Additional Water Distribution and Collection System Capacity:*** to ensure sufficient capacity to meet needs through build-out; and
- ***Increase Energy Efficiency:*** by providing delivery system enhancements, additional storage and implementation of improved operational procedures.

The shortfall between water supply and demand resulted in a moratorium on new connections that was imposed by the Department of Health Services. In response to the moratorium, the City also prepared a *Master Plan of Water Supply*. During April 1998, the City prepared the *Chino Hills Reclaimed Water System: Investigation and Computer Analysis.* This document outlined a recycled water system for the City, which forms the basis for concepts developed in the current Plan. No environmental analysis was prepared for the 1998 investigation.

The City's most recent *Sewer Master Plan* was prepared in December of 1997. This document updates the prior *Master Plan* prepared in 1989 (before incorporation of Chino Hills) by the San Bernardino County Waterworks District No. 8. As with the recycled water analysis, no environmental analysis was prepared for the 1997 sewer studies.

3.3.2 OVERVIEW OF *2005 WATER, RECYCLED WATER AND SEWER MASTER PLAN*

As part of the current *Master Plan* effort, the City's water demand estimates have been revised to account for additional population, the increased availability of recycled water, and changes in conservation practice. The current *Master Plan* not only addresses changes that have taken place in Chino Hills over the past 8 years, but also offers an updated program for developing, operating and maintaining systems that deal with all three resources – ground and surface water sources, recycled water supplies, and sewer flows. The 2005 *Plan* is an integrated blueprint with modeling and mapping tools to assist the City in meeting water, recycled water and sewerage facility needs in a reliable and cost-effective manner through the estimated build-out year of 2025.

3.3.3 OVERALL RECOMMENDED IMPROVEMENTS

As a comprehensive document for the water, recycled water and sewer systems, the *Master Plan* Capital Improvement Program (CIP) contains recommendations for all three systems. Key recommendations are summarized in Table 3-2, followed by discussion of the City's water, recycled water and sewer systems and proposed improvements. The full Capital Improvement Program is contained in the proposed *Master Plan* and available for public review at the City of Chino Hills.

Table 3-2
***MASTER PLAN* RECOMMENDATIONS**

SYSTEM ELEMENT	RECOMMENDED IMPROVEMENTS
Water, Recycled Water and Sewer Distribution and Collection System	CIP recommendations include pump stations, reservoirs, pipelines, force mains and valve upgrades. A majority of the water system CIP is new reservoirs, well upgrades and pipelines. Many of the water & recycled system improvements focus on new developments in the southern portion of the City. The sewer CIP is primarily pipelines and pump stations in both existing and new neighborhoods; the most substantial sewer system improvements are in Carbon Canyon.
Water Supply CIP	The water supply CIP focuses on well upgrades and new wells to increase the City's reliable groundwater production capability. These efforts will be undertaken in the broader context of evolving water quality, subsidence and institutional issues. Interconnects are also proposed with the cities of Chino, Pomona and Brea.
Booster Pump Station and Lift Station CIP	Most of the water and recycled water booster pump station facilities are either existing or under design/construction. A total of four new water and one recycled water pump

	stations are proposed, with upgrades to two water pump stations.
Wastewater System CIP	Multiple new lift stations are proposed along Carbon Canyon to serve new development and allow older areas to convert from septic systems to municipal service. Upgrades to existing lift stations may also be required over the next decade, following assessment of existing pump station capacities.
Reservoir CIP	Reservoir projects are proposed in the CIP for both the water and recycled water systems. Improvements include various reservoir pump and valve upgrades plus: • One reservoir to be converted from potable to recycled water • One reservoir to be converted from recycled to potable • One old reservoir to be replaced • Four reservoirs to be eliminated • Seven new reservoirs
Pressure Reducing Station CIP	Based on a 2005 City evaluation, substantial improvements will be made to the pressure reducing stations including improvements to the pumps, hatches, accessways, valves and relief valves, bypass systems, and control improvements.
Water Pipeline/Sewer Main CIP	Most of the City's pipelines and mains are operating effectively. However, the *Master Plan* includes a number of new pipelines to meet existing capacity requirements, resolve deficiencies, and serve future development.

3.3.3 DESCRIPTION OF WATER SYSTEM

3.3.3.1 Existing Water Supply Sources

The City's current portfolio of water sources includes the following, as shown in Exhibit 3:

- Groundwater from Chino Groundwater Basin extracted through City-owned wells
- Groundwater from Chino Groundwater Basin extracted through wells owned by Monte Vista Water District (MVWD) and delivered along with imported water through a recently constructed 42" transmission main;
- Imported water from the State Water Project (SWP) purchased from Inland Empire Utilities Agency (IEUA, a member of Metropolitan Water District of Southern California) and delivered to the Water Facilities Agency's (WFA) Joint Powers Agua de Lejo Water Treatment Facility in Upland. The supplies are conveyed from Agua de Lejo into Chino Hills through the 30" Ramona Feeder or the new 42" transmission main. Part of the imported water capacity is the City's original WFA entitlement, and part is additional entitlement obtained from MVWD.
- Desalted groundwater obtained from Chino Groundwater Basin through the Reverse Osmosis (RO) treatment facilities of the Chino Basin Desalter Authority (CDA)
- Recycled water obtained from IEUA regional recycled water facilities and delivered through a separate recycled water system to meet nonpotable uses in the Chino Hills.

The *Draft Master Plan* indicates that the City has now secured access to potable water supply entitlements that are adequate to meet projected ultimate demands, as outlined in Table 3-3.

Table 3-3
SOURCE CAPACITY REQUIREMENTS & SECURED SUPPLY

SOURCE CAPACITY	MAXIMUM DAY DEMAND (mgd)				
	EXISTING[4]	2010	2015	2020	ULTIMATE
Potable System					
Capacity Requirement	23.93	29.10	30.24	31.25	32.86
Capacity Available	41.14	44.40	48.94	48.94	48.94
Recycled System					
Capacity Requirement	1.60	5.14	7.14	7.14	7.14
Capacity Available	1.60	5.14	7.14	7.14	7.14
Total					
Capacity Requirement	25.53	34.23	37.38	38.39	40.00
Capacity Available	42.74	49.54	56.08	56.08	56.08
Surplus/(Deficiency)	**17.21**	**15.30**	**18.70**	**17.69**	**16.08**

[4] 'Existing' refers to 2004-2006, during which Master Plan and environmental studies have been conducted.